

REMARKS/ARGUMENTS

This paper is submitted responsive to the official action mailed July 15, 2003. Reconsideration of the application in light of the accompanying remarks and amendments is respectfully requested.

In the aforesaid action, the Examiner rejected the pending claims as either anticipated by GB 2,114,717 to Hill et al. (Hill), or obviated by Hill in combination with secondary references. By the present amendment, the claims have been presented in such a manner that they are believed to define patentably over the art of record.

The invention is drawn to a control arrangement for engines, and includes a number of aspects which are beneficial including the configuration of the spindle which serves to ensure against self-locking (page 2, lines 14-20 for example), and a force sensor which serves to switch on a regulating device upon sensing a force applied to the gas lever (page 4, lines 6-12, for example). By the instant amendment, claim 1 has been amended to recite both of these features, while new independent claims 15, 16 and 18 are drawn to these features separately from each other.

Independent claims 1, 15 and 16 include the above referenced force sensor. Turning to the art of record, the Examiner asserts that Hill teaches the force sensor of the present invention, and points to page 7, lines 30-50 of same. While it is true that Hill teaches a sensor, the sensor discussed in the section cited by the Examiner is clearly for sensing the direction of manual movement of the grip. This is subtly but importantly different from that which is claimed in the present application, wherein force is sensed

rather than actual movement. In the present application, one of the reasons for activating the regulating mechanism with the force sensor is to assist in the manual movement of the gas lever, and it is advantageous that in the present invention no actual movement of the lever is required in order to obtain this assistance. Thus, it is respectfully submitted that the teaching of Hill does not anticipate, and nor does it obviate, this subject matter of the present invention drawn to the force sensor as set forth in independent claims 1, 15 and 16. It is further submitted that none of the other art of record discloses or suggests this subject matter and, this, that claims 1, 15 and 16 are patentable over the art of record.

It is further noted that independent claim 16 also calls for the force sensor to be assigned to at least one of the gas lever and the guide bush. This subject matter further highlights the difference of the presently claimed sensor from that of the Hill reference. A sensor such as that disclosed by Hill would not be assigned to these components as such assignment would not allow detection of movement as taught by Hill. Thus, the position of the sensor is submitted to further patentably distinguish claim 16 over the art of record.

Independent claims 1 and 18 are drawn to the subject matter of the present invention wherein the spindle has a trapezoidal configuration to help ensure against self-locking. The Examiner states that although Hill does not teach this subject matter, US Patent Number 5,720,202 to Senjo et al, (Senjo) teaches this subject matter. Senjo is drawn to an actuator wherein a feed screw is mounted in supports to allow travel of a feed nut engaged with the screw. Senjo merely states that his invention is useful with a ball screw, but is also effective for a square screw, a trapezoidal screw or the like (See column 9, lines 44-46). It is respectfully submitted that the Hill and Senjo references would not

lead a person of ordinary skill in the art to the subject matter of the present invention. Specifically, Hill states that a ball-screw configuration is preferred (See page 5, lines 111-116). The fact that Senjo teaches that his invention, completely unrelated to the endeavours of the present applicant and of Hill, would be useful with a ball-screw and other types of screws would not lead a person of ordinary skill in the art to selectively pick the trapezoid screw mentioned in Senjo and incorporate such a screw type into Hill, against the teachings of Hill, to arrive at the claimed subject matter.

Based upon the foregoing, it is respectfully submitted that claims 1 and 18 are patentable over the art of record.

Dependent claims 2-3, 5-14 and 17 all depend directly or indirectly from independent claims 1, 15, 16 or 18 as discussed above and are submitted to contain patentable subject matter based upon the dependence and also in their own right.

For example, dependent claim 17 is drawn further to the specific positioning of the force sensor of the present invention and is submitted to be patentable over the art of record.

Also, dependent claim 12 further recites a guide element (10) to which the gas lever is connected, which guide element is approximately parallel to the spindle. The Examiner does not mention this subject matter in his treating of claim 12 and, the art of record does not appear to disclose or suggest such a guide element.

An earnest and thorough attempt has been made by the undersigned to resolve the outstanding issues in this case and place same in condition for allowance. If the Examiner has any questions or feels that a telephone or personal interview would be helpful in

Appn. No. 10/009,006
Response to Official Action of July 15, 2003
Response Date December 15, 2003

resolving any outstanding issues which remain in this application after consideration of this amendment, the Examiner is courteously invited to telephone the undersigned and the same would be gratefully appreciated.

It is submitted that the claims as amended herein patentably define over the art relied on by the Examiner and early allowance of same is courteously solicited.

It is believed that no additional fee is due in connection with this response since four (4) independent claims were paid for upon the initial filing. If, however, any fee is due, please charge same to deposit account no. 02-0184.

Respectfully submitted,

By

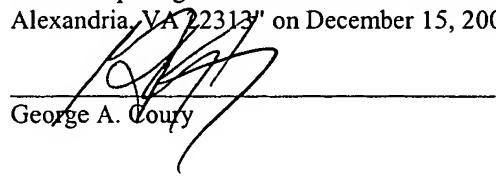


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December 15, 2003

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: "Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313" on December 15, 2003.



George A. Coury